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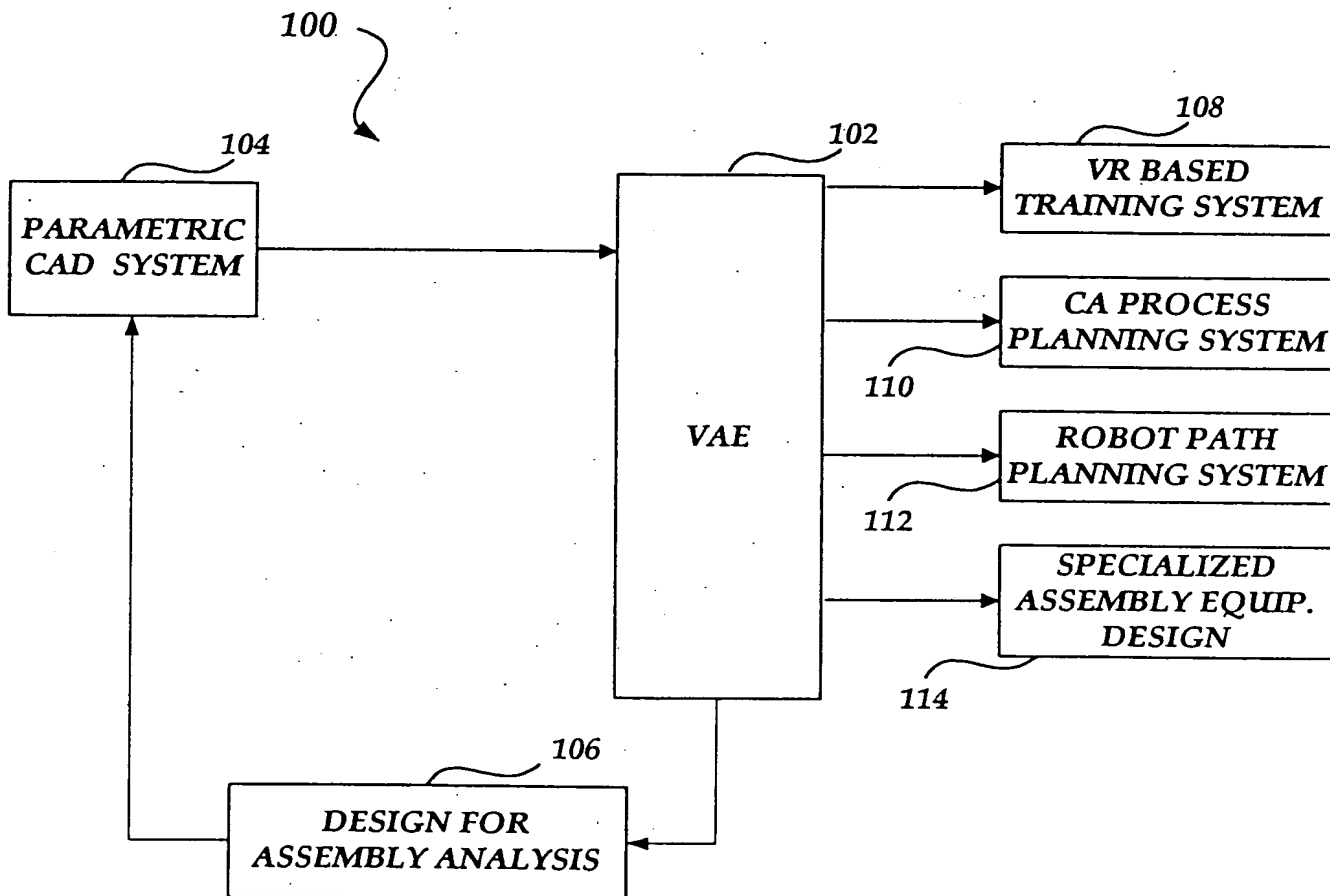


FIG. 1

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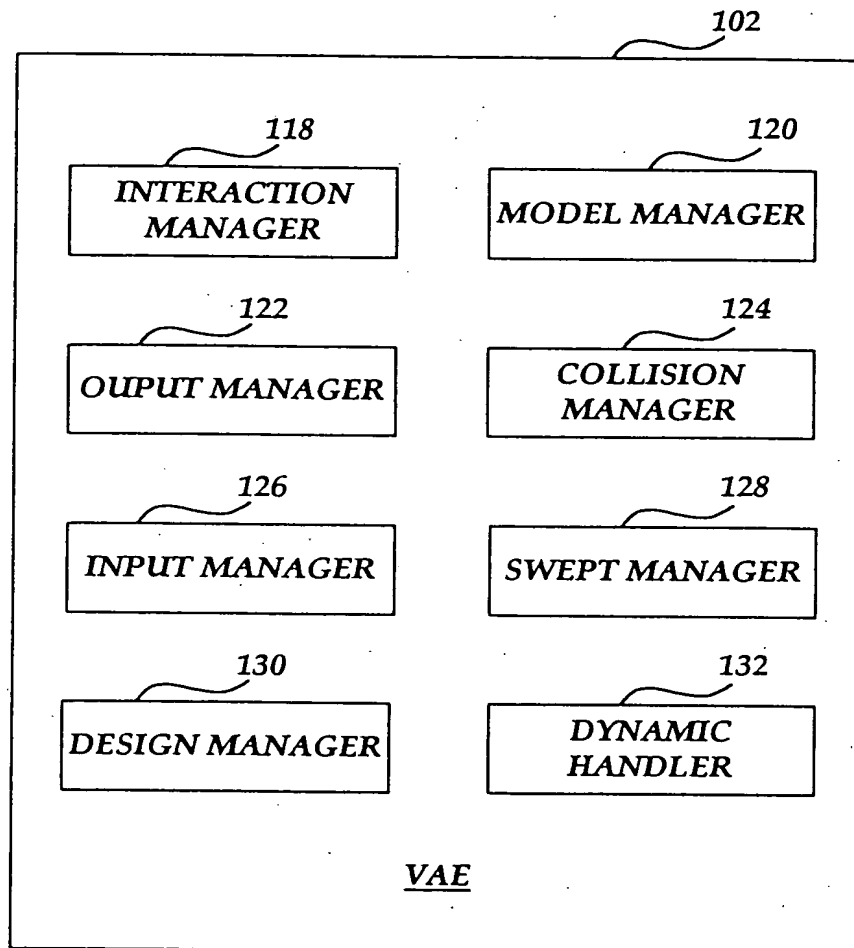
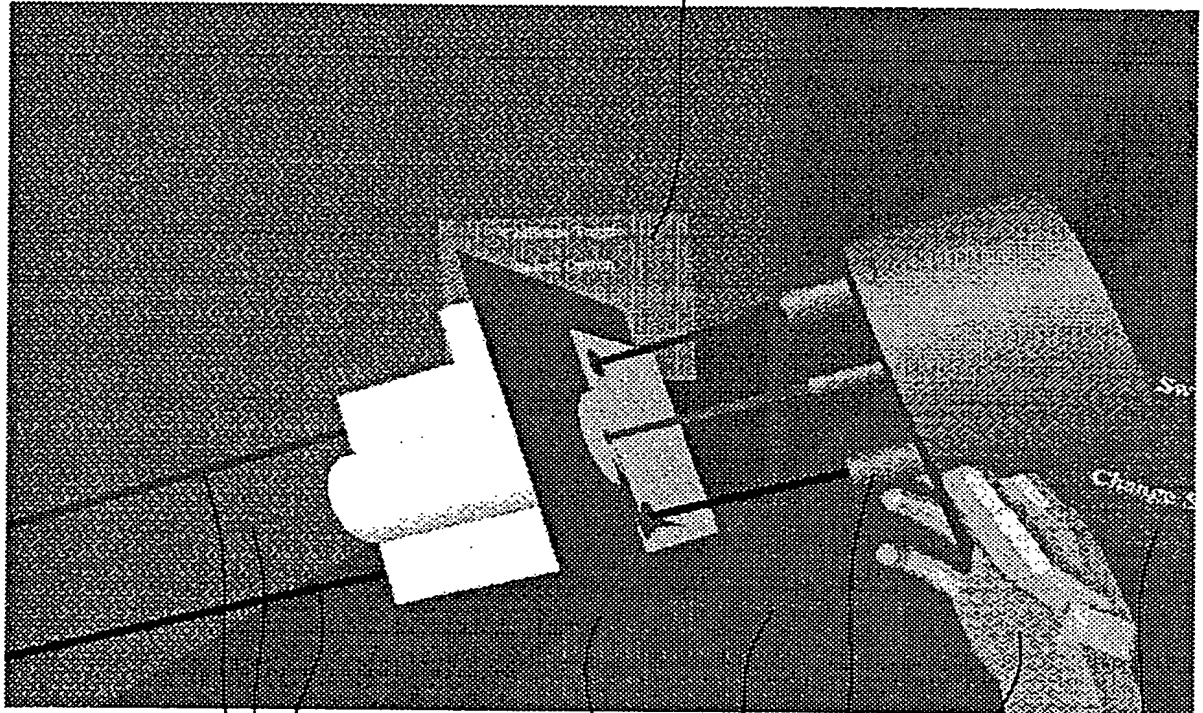


FIG. 2

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134

150



136
(TYP.)

138

154

140

142

152

FIG. 3

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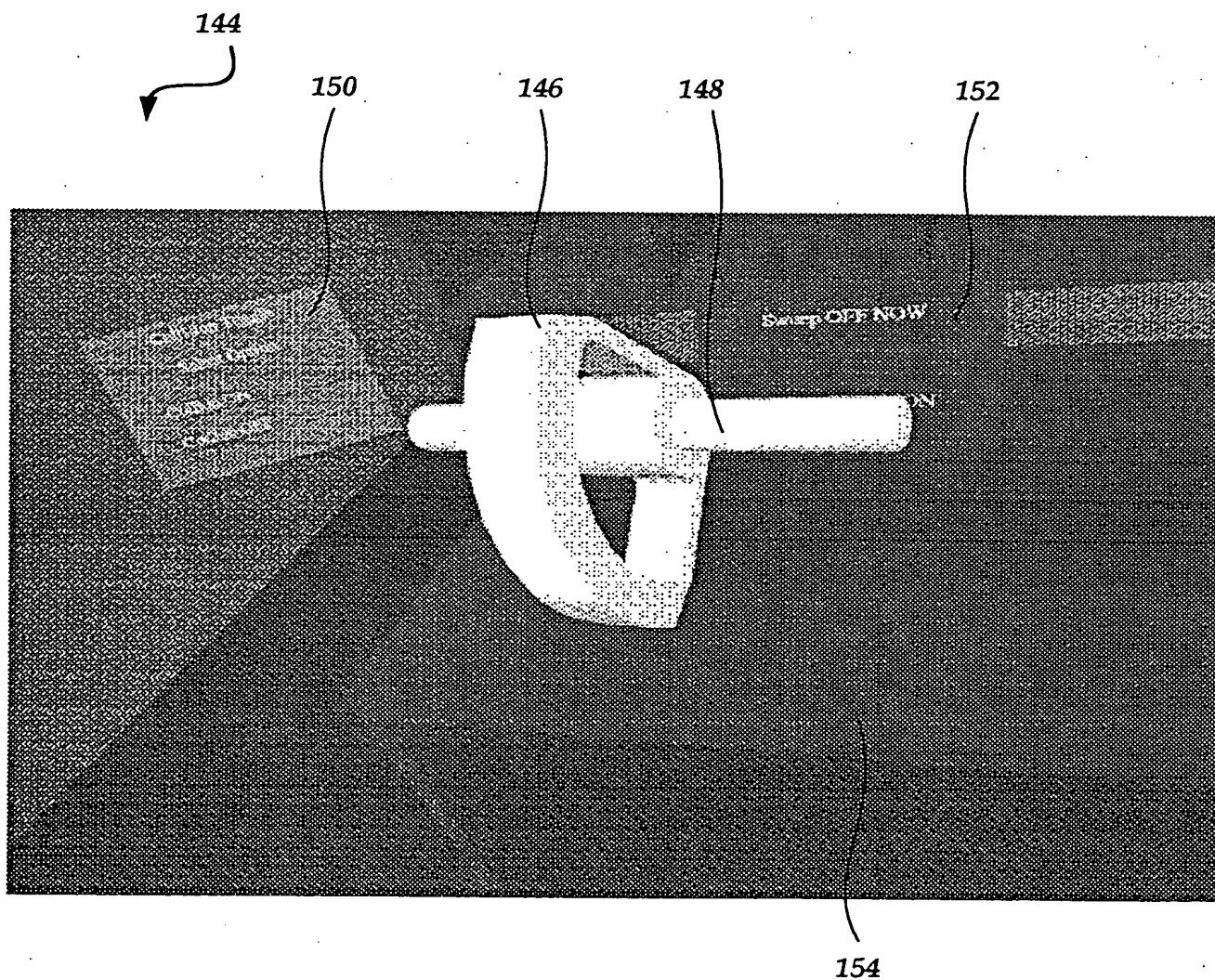


FIG. 4

EXPRESS MAIL NO.: EL742878527US

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FIG. 5

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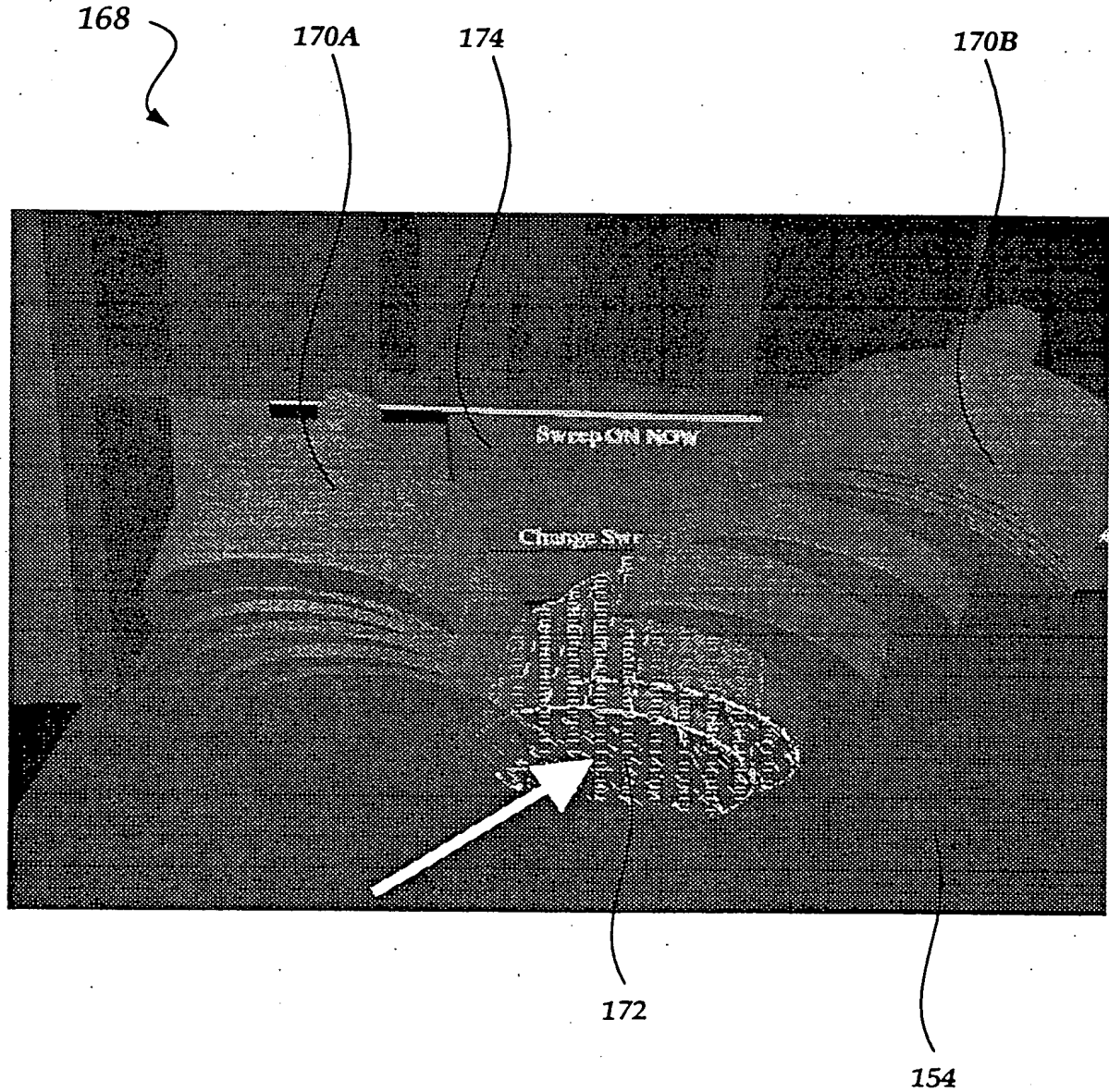


FIG. 7

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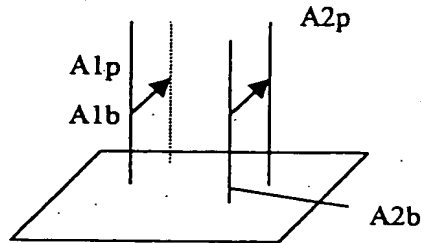


FIG. 8

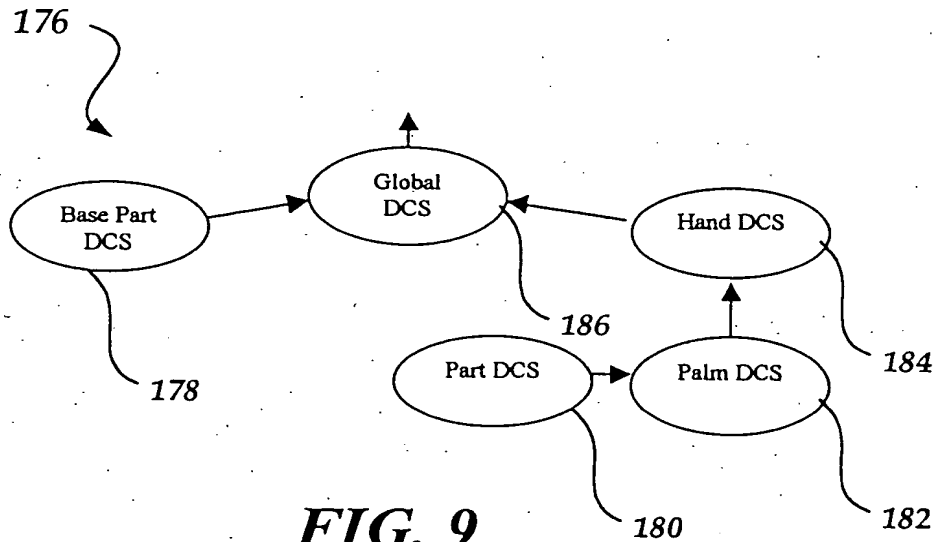


FIG. 9

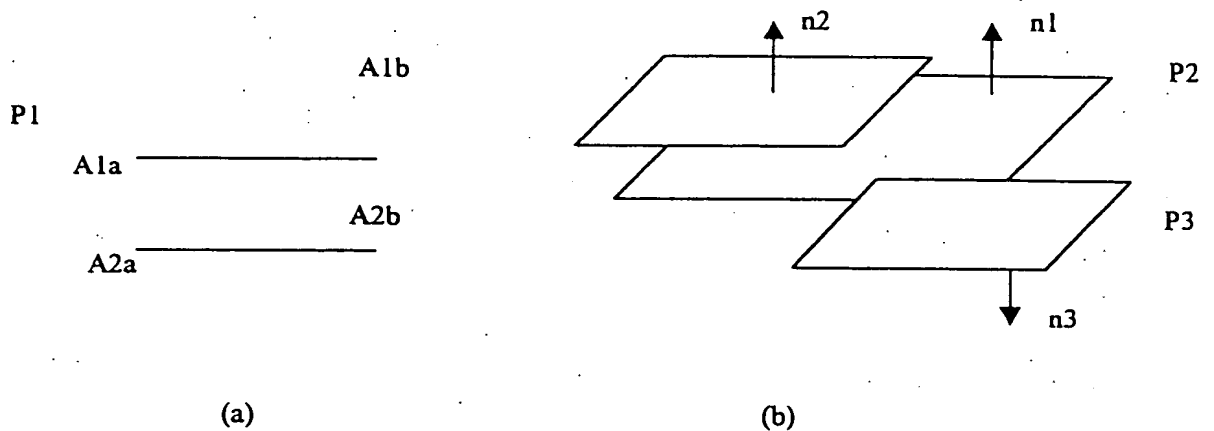


FIG. 10

Inventors: S. Jayaram et al.
Docket No.: WSUR117441
EXPRESS MAIL NO.: EL742878527US

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FIG. 11

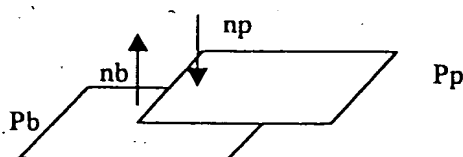


FIG. 12

Combination and order	Conditions
A1, A2	A1 $n//$ A2
A1, A2, A3	A1 $//$ A2, A1 $n//$ A3
A1, A2, P3	A1 $//$ A2, A1 $n//$ P3
A1, P2	A1 $n//$ P2, A1 $n\perp$ P2
A1, P2, A3	A1 $//$ P2, A1 $n//$ A3
A1, P2, P3	A1 $//$ P2, A1 $n//$ P3
A1, P2, A3	A1 \perp P2, A3 any case
A1, P2, P3	A1 \perp P2, P2 $n//$ P3
P1, A2	P1 $n//$ A2, P1 $n\perp$ A2
P1, A2, A3	P1 $//$ A2, A2 $n//$ A3
P1, A2, P3	P1 $//$ A2, A2 $n//$ P3
P1, A2, A3	P1 \perp A2, A3 any case
P1, A2, P3	P1 \perp A1, P1 $n//$ P3
P1, P2, A3	P1 $n//$ P2, (intersection line of P1, P2) $n//$ A3
P1, P2, P3	P1 $n//$ P2, P1 $n//$ P3, P2 $n//$ P3

FIG. 13

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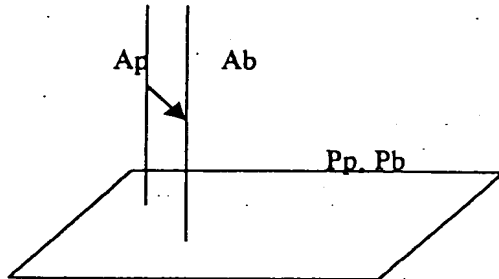


FIG. 14

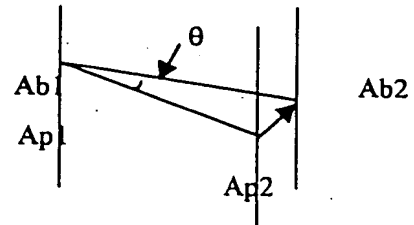


FIG. 15

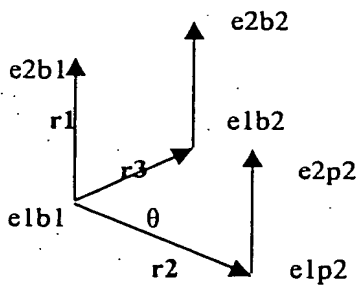


FIG. 16

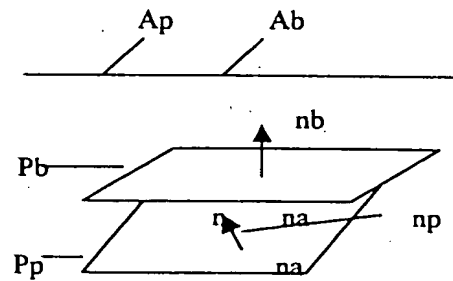


FIG. 17

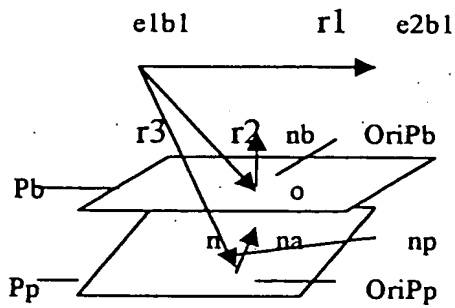


FIG. 18

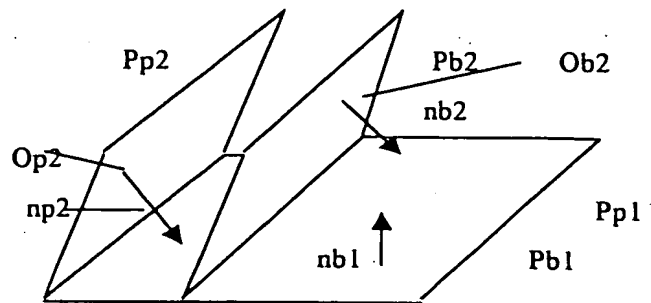


FIG. 19

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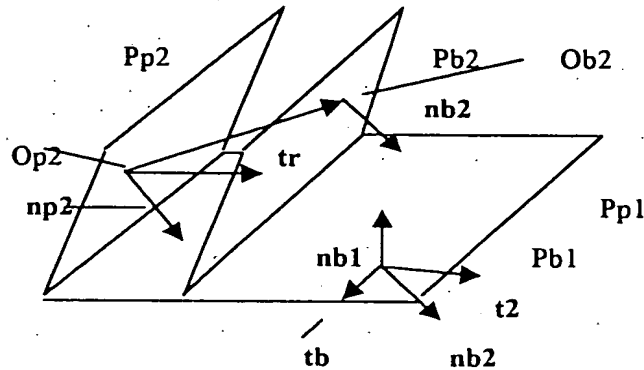


FIG. 20

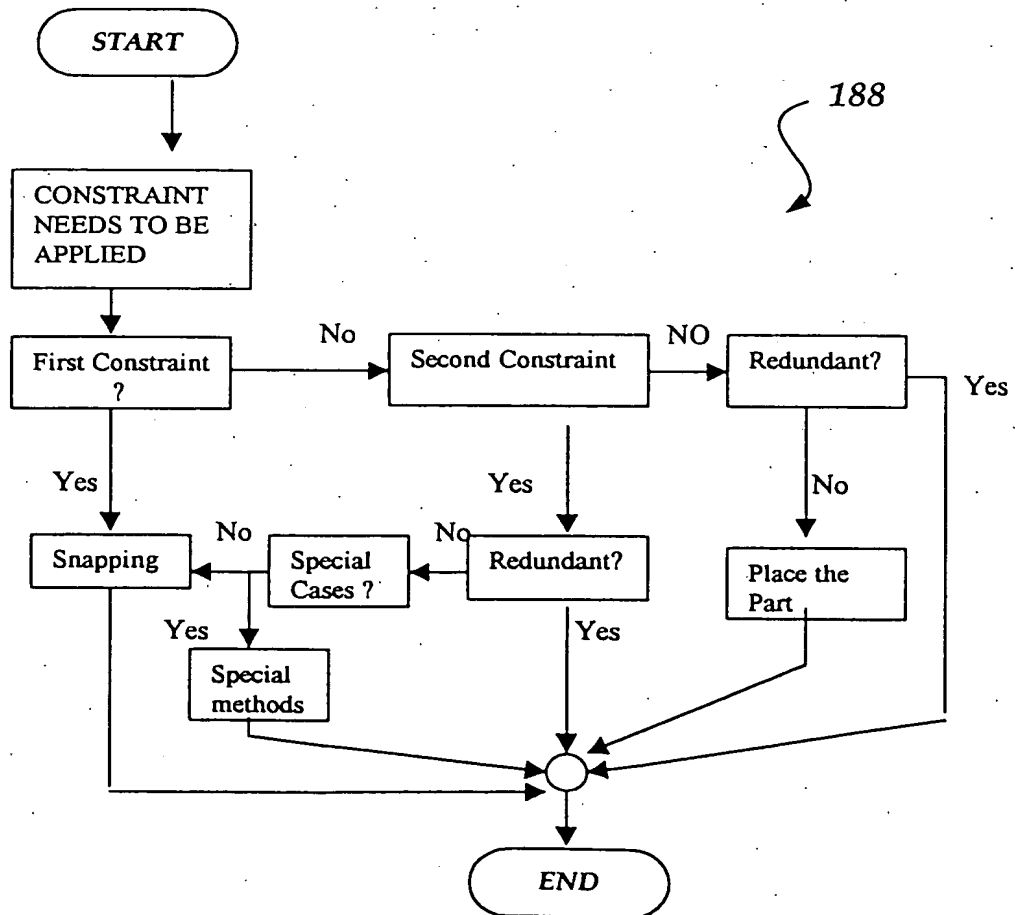
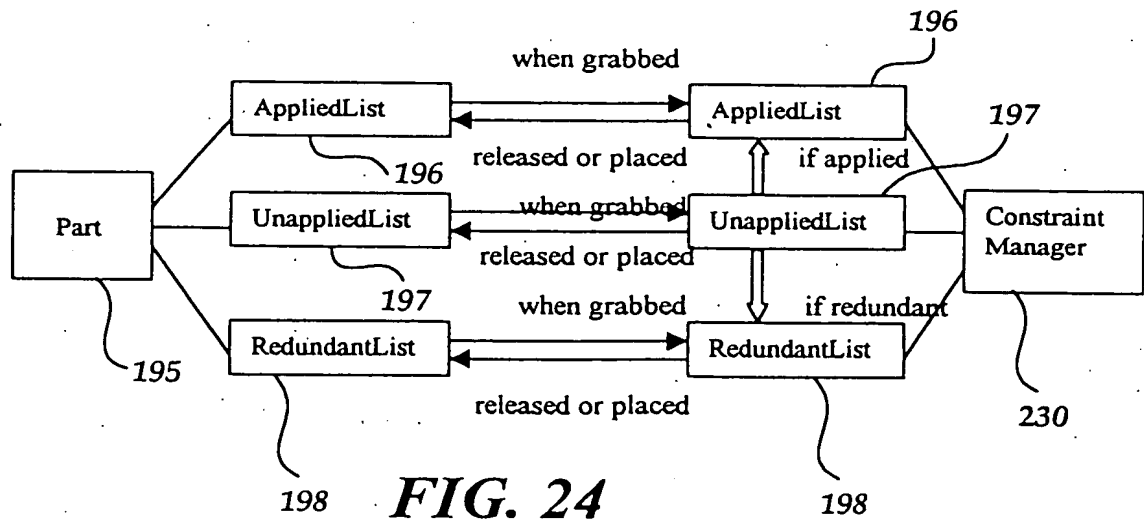
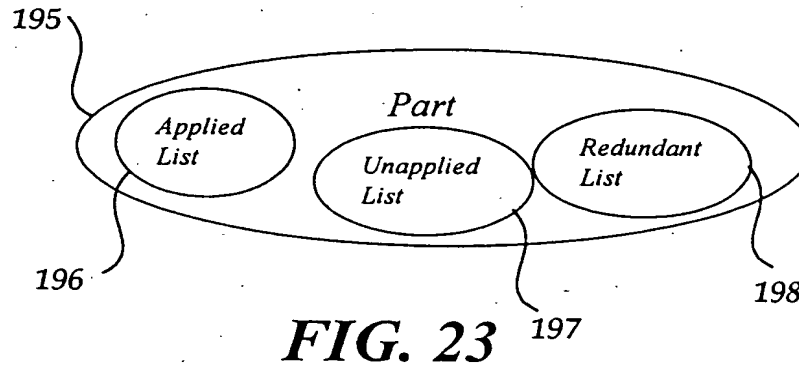
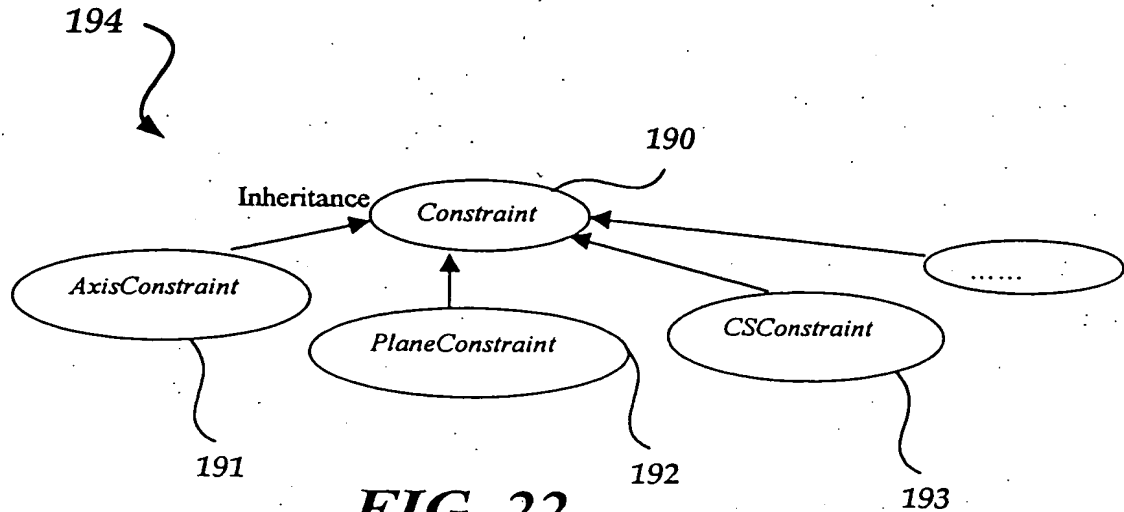


FIG. 21

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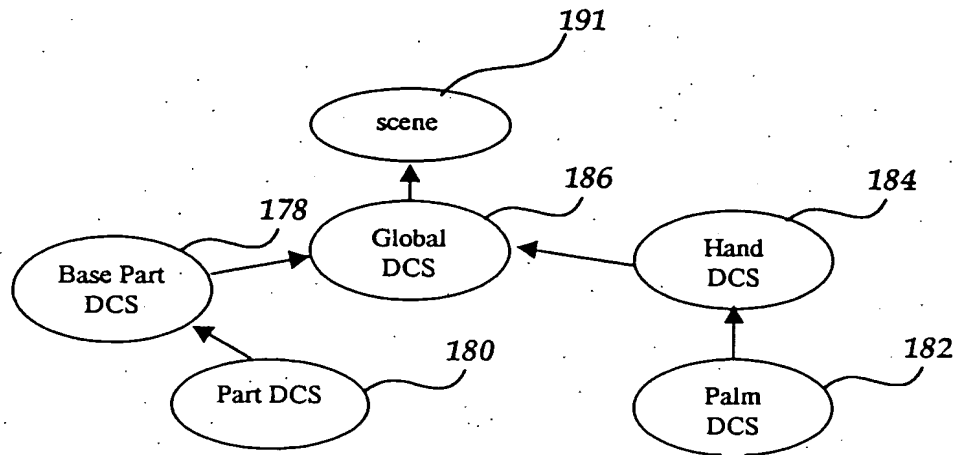


Fig. 25

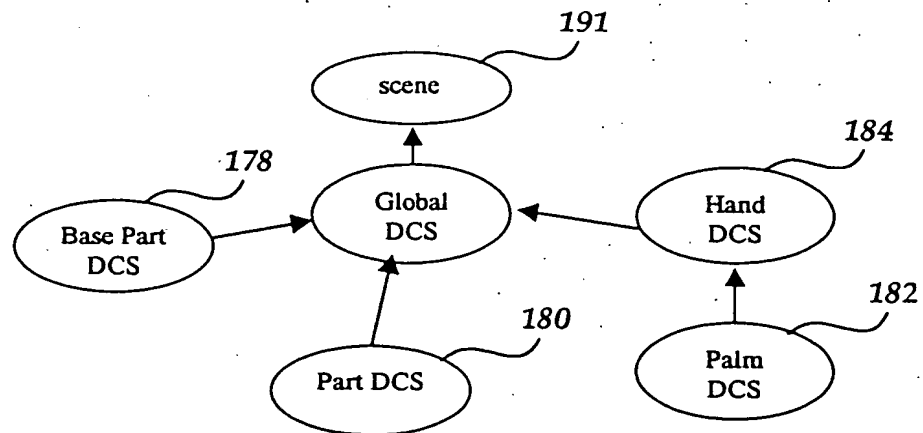


Fig. 26

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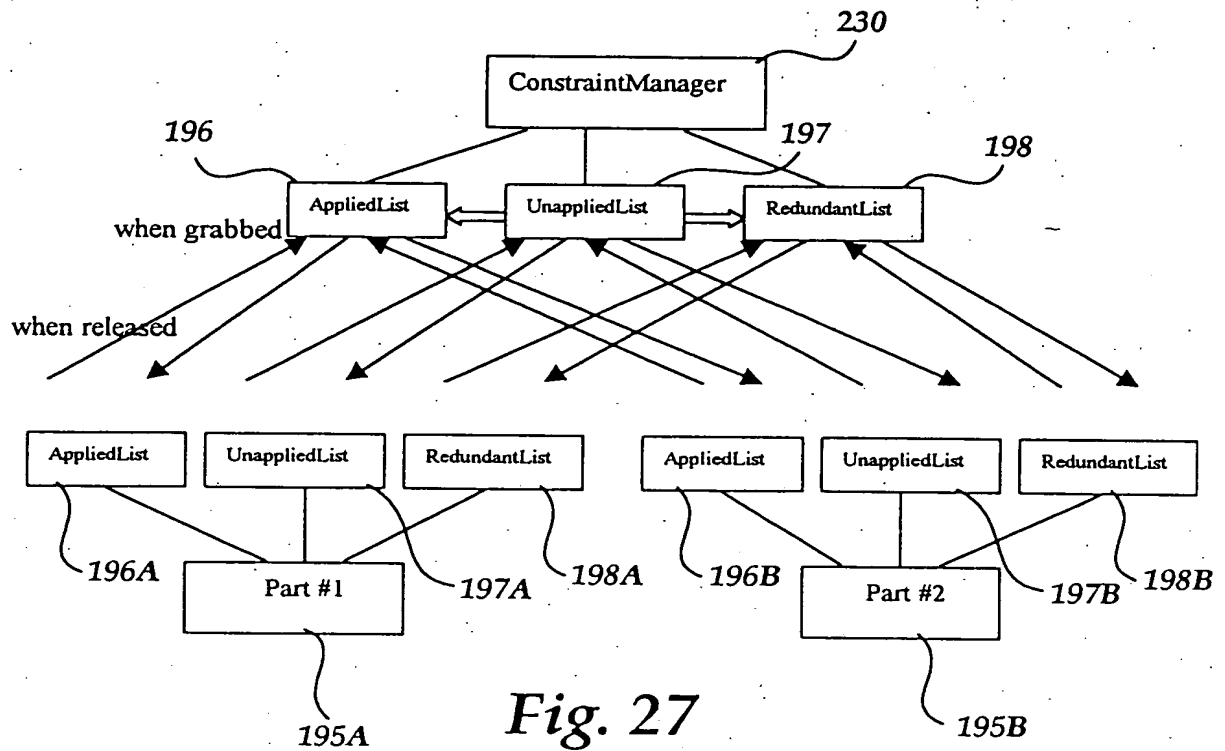


Fig. 27

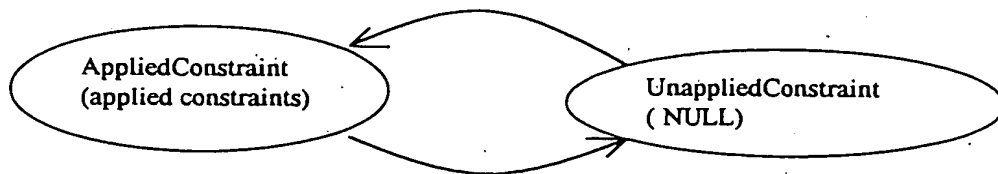


Fig. 28

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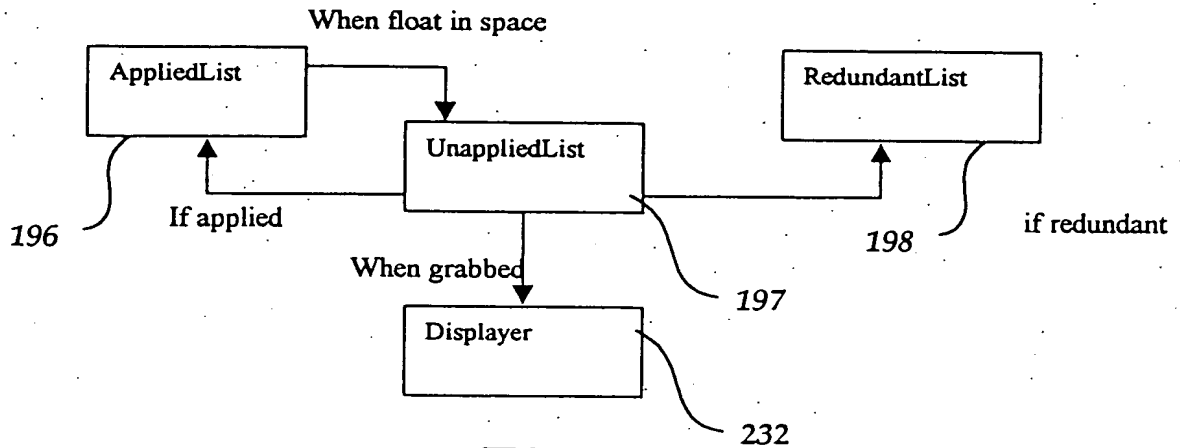


Fig. 29

crank property file

LENGTH UNITS: Inch

MASS UNITS: Pound

Surface Finish: 0.001000

Default Linear Tolerances: +- 0.100000 +- 0.010000 +- 0.001000

Default Angular Tolerances: ANG+- 0.500000

Volume: 12.6798973

Surface Area: 69.5717665

Density: 1.0000000

Mass: 12.6798973

CENTER OF GRAVITY wrt DefaultCSC0 coordinate frame: X Y Z

0.0000000 1.1668295 0.5907307

INERTIA wrt DefaultCSC0 coordinate frame:

INERTIA TENSOR:

Ixx Ixy Ixz 69.0504703 -0.0536521 0.0000182

Iyx Iyy Izz -0.0536521 17.8369050 -3.1957782

Izx Izy Izz 0.0000182 -3.1957782 68.8163268

INERTIA at CENTER OF GRAVITY wrt (Axis aligned). DefaultCSC0 coordinate frame:

INERTIA TENSOR:

Ixx Ixy Ixz 47.3620913 -0.0536521 0.0000182

Iyx Iyy Izz -0.0536521 13.4120927 5.5442472

Izx Izy Izz 0.0000182 5.5442472 51.5527601

PRINCIPAL MOMENTS OF INERTIA(wrt MC):

I1 I2 I3 12.6224281 47.3621611 52.3423549

ROTATION MATRIX from DefaultCSC0 orientation to PRINCIPAL AXES:

0.0015290 -0.9999977 -0.0015153

0.9900096 0.0013001 0.1409941

-0.1409918 -0.0017157 0.9900093

Fig. 30

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Lifting Capacity for infrequent movement and short distances
(pounds)

	Men	Women
1. Both hands in front Or one hand at side	60	40
2. Both hands 20 inches in front	20	13.3
3. Each hand at side	30	20
3. One hand or each 5 inch out	35	23.3

Fig. 31

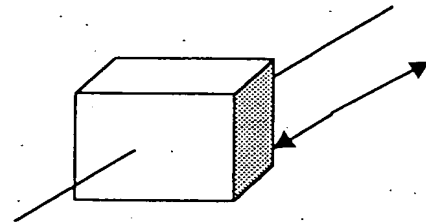
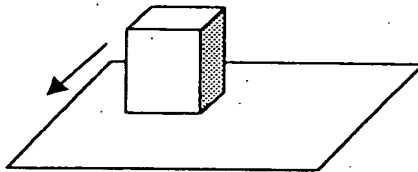


Fig. 32

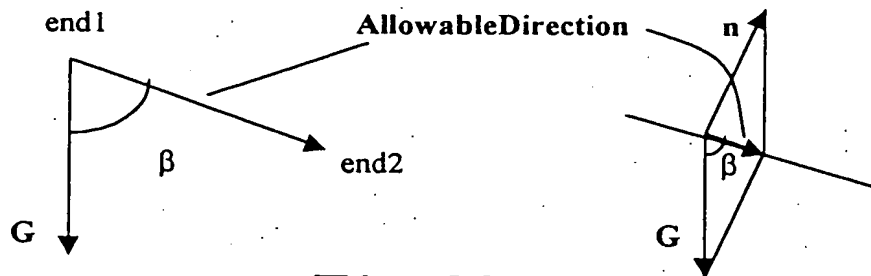


Fig. 33

000005-1162401

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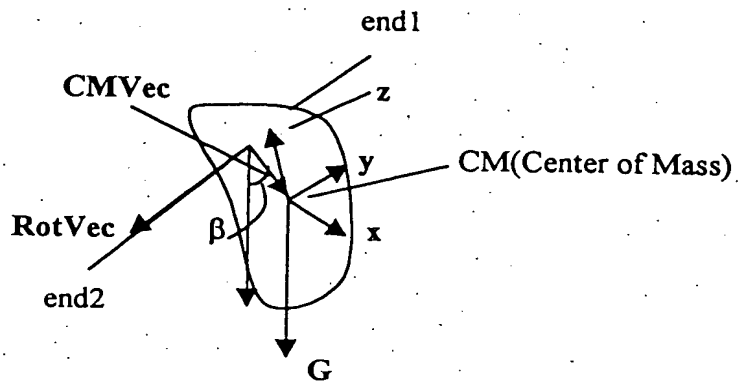


Fig. 34

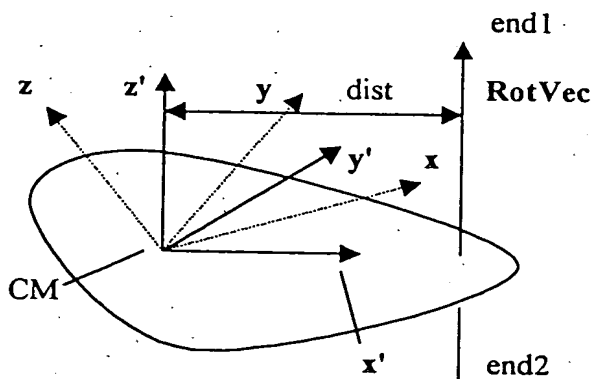


Fig. 35

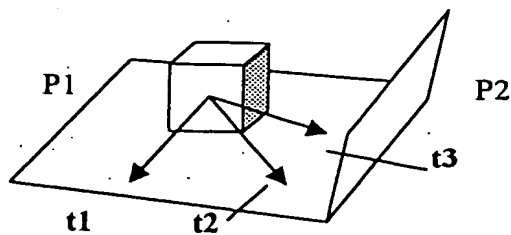


Fig. 36

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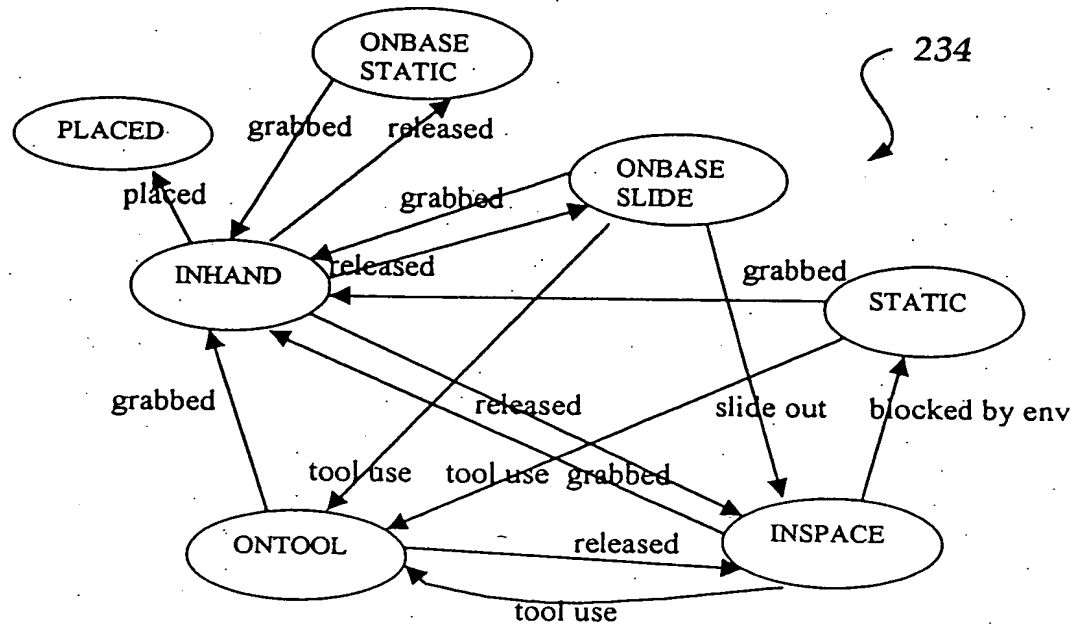


Fig. 37

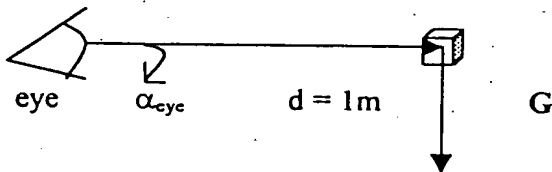


Fig. 38

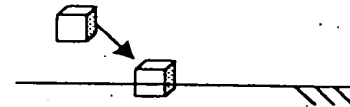


Fig. 39

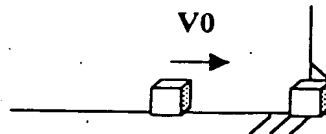


Fig. 40

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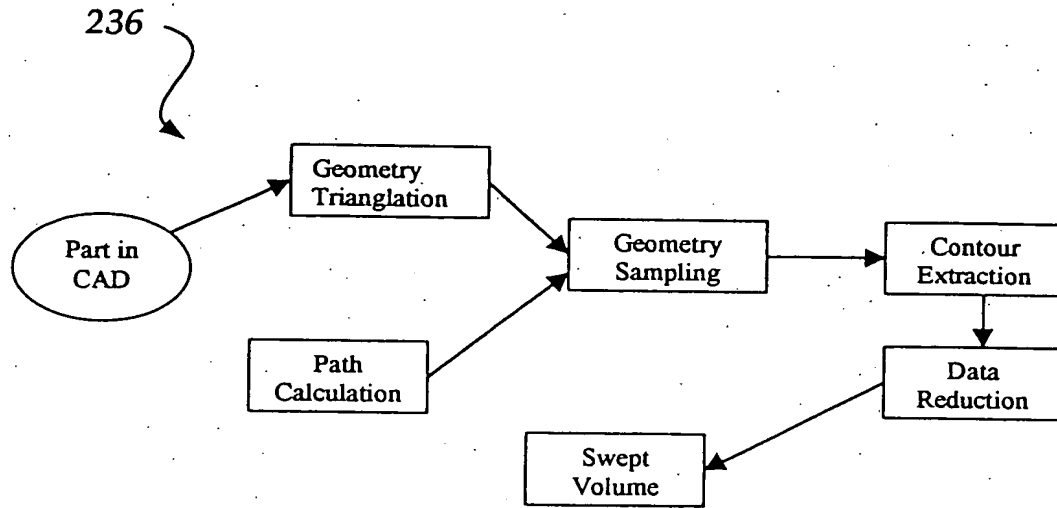


Fig. 41

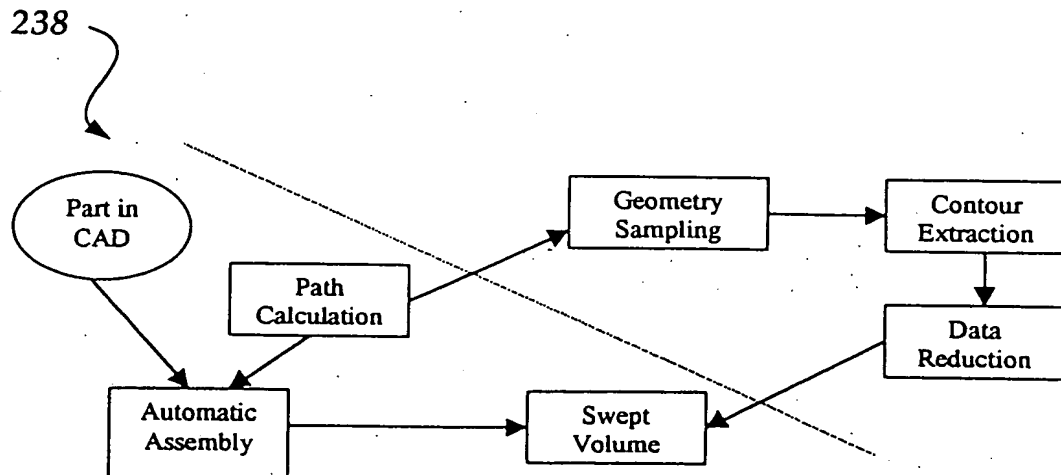


Fig. 42

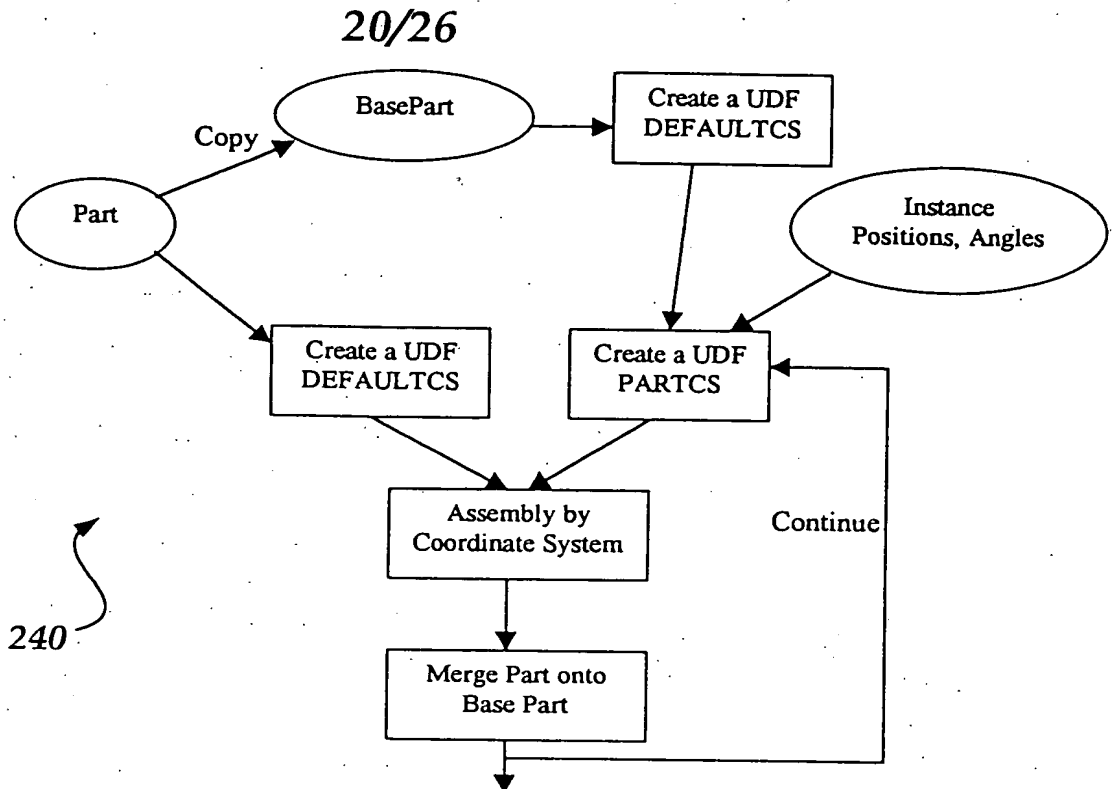


Fig. 43

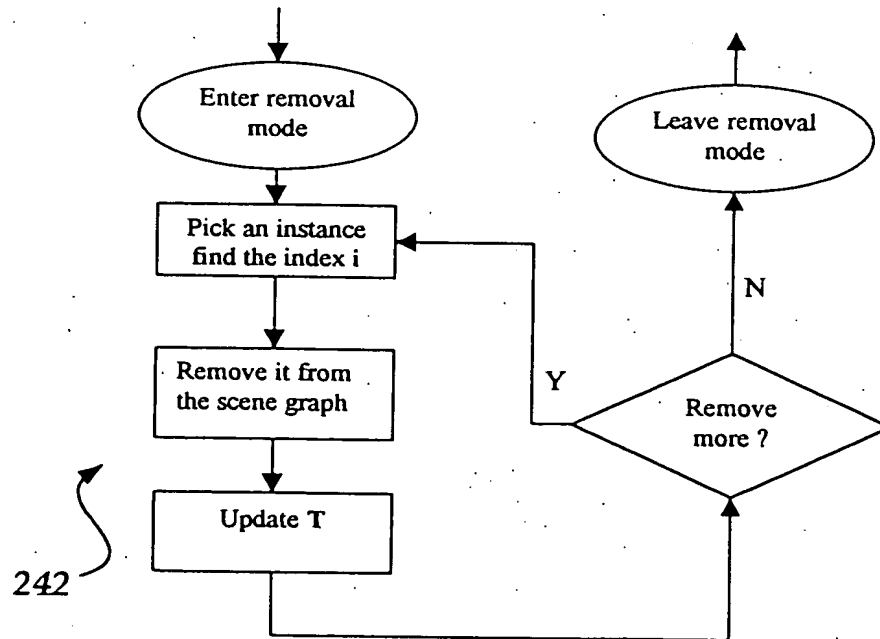


Fig. 44

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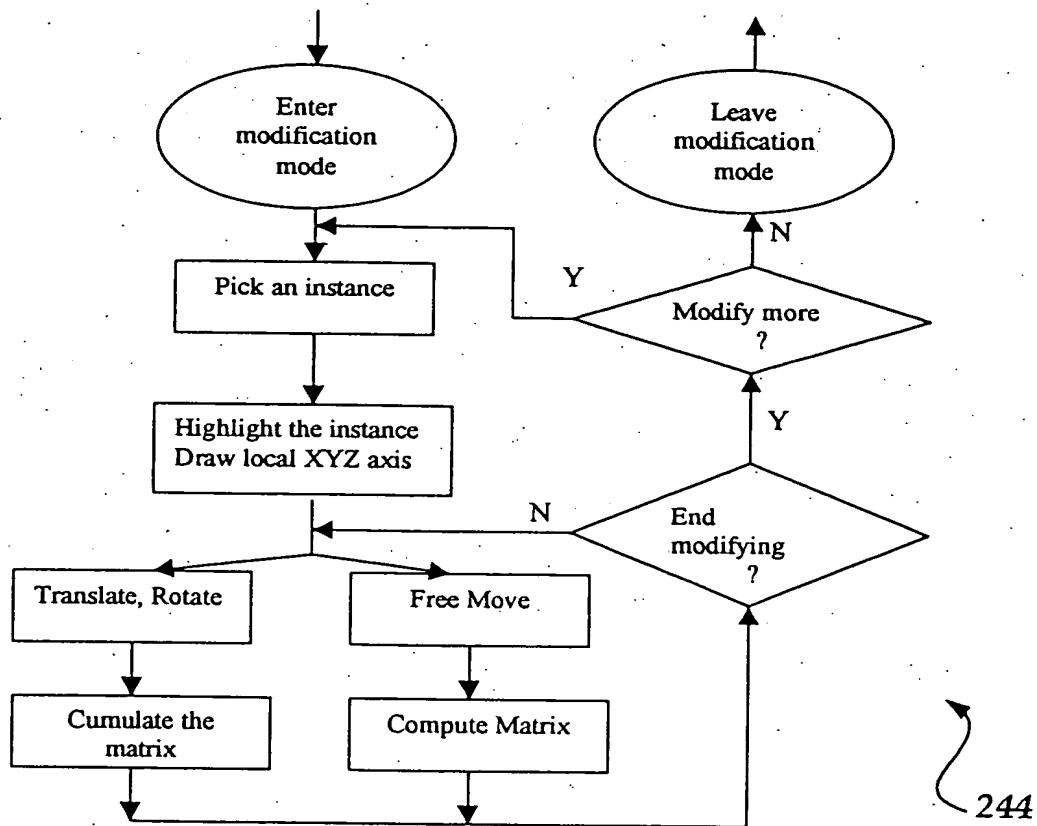


Fig. 45

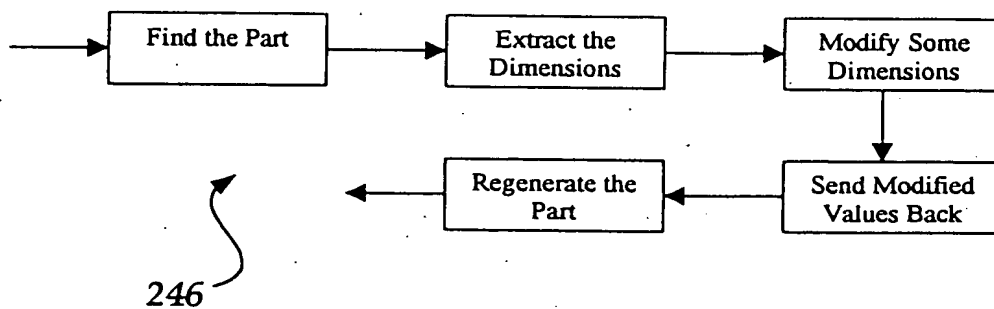
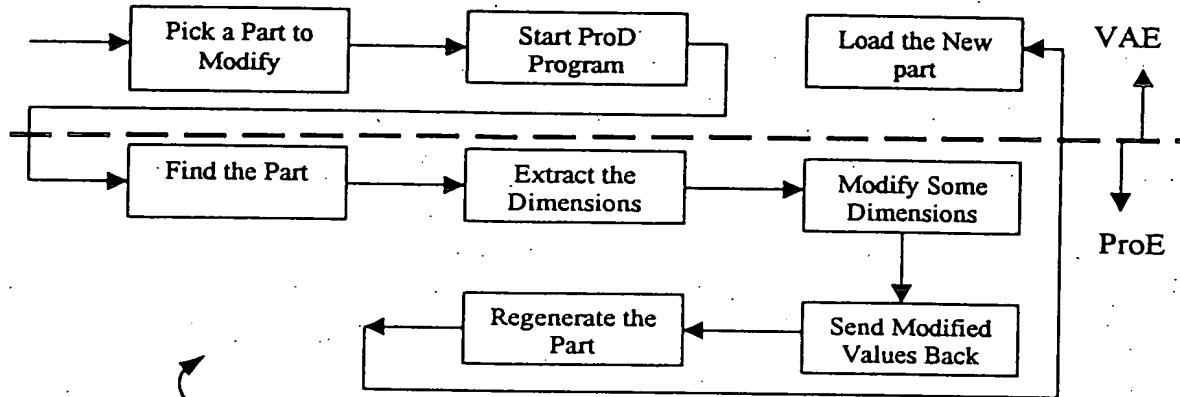


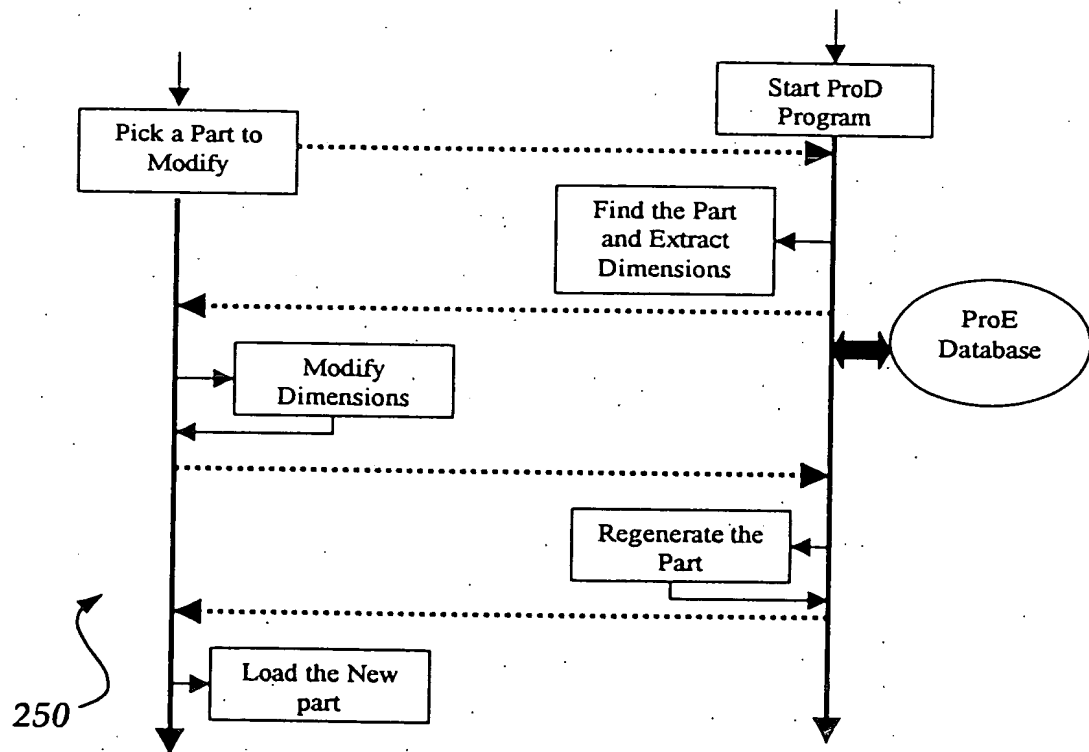
Fig. 46

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Fig. 47



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Fig. 48

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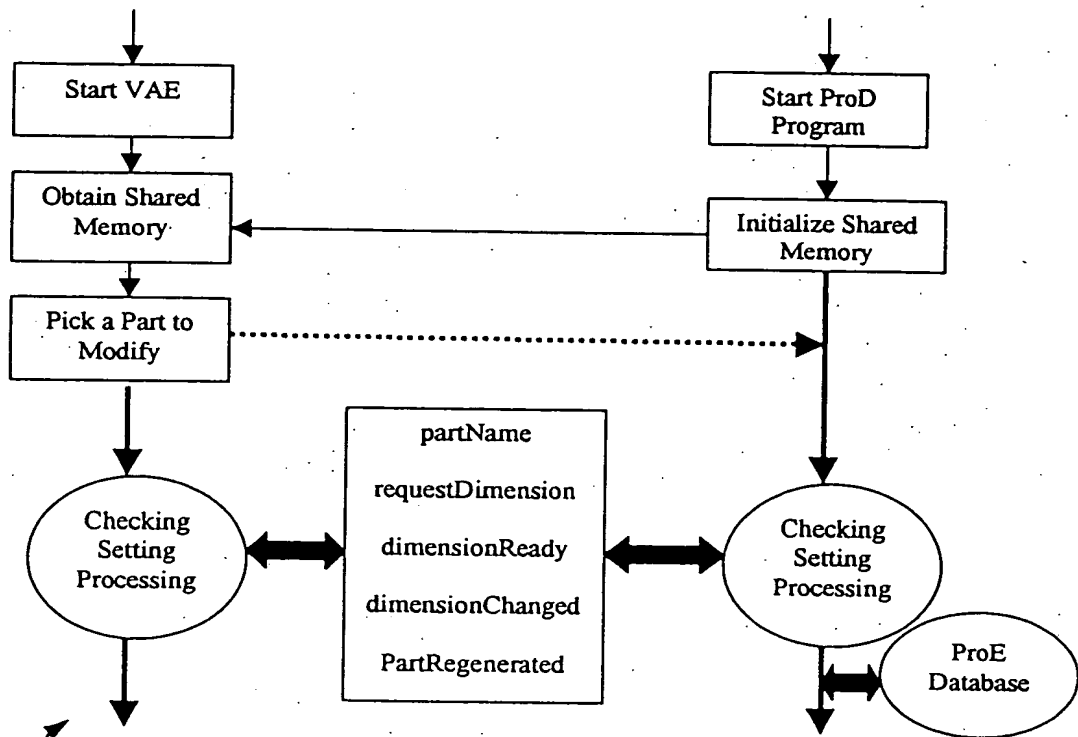


Fig. 49

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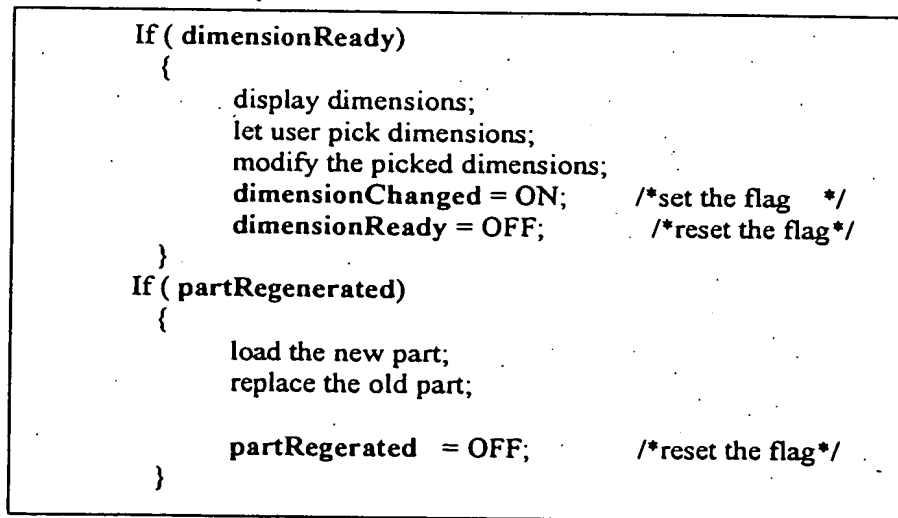


Fig. 50

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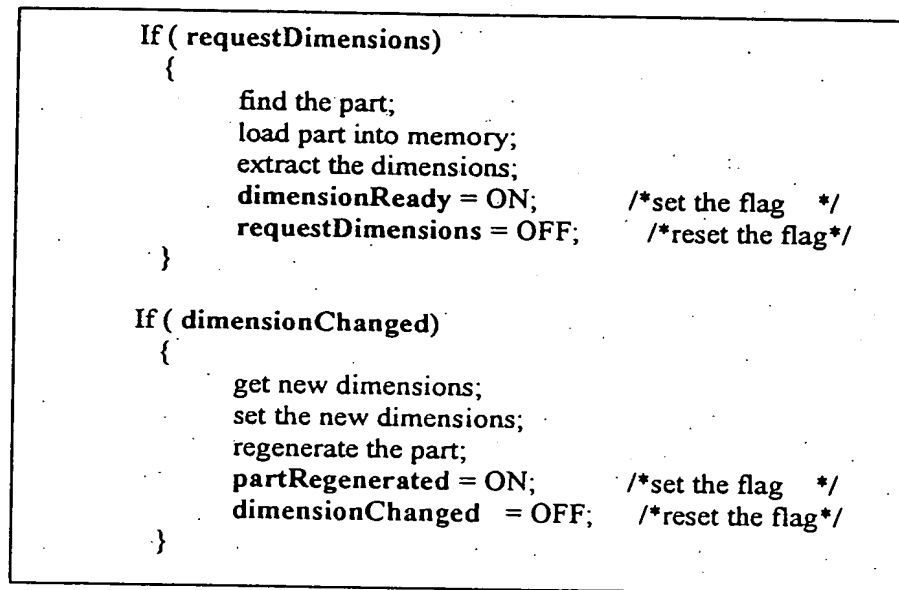


Fig. 51

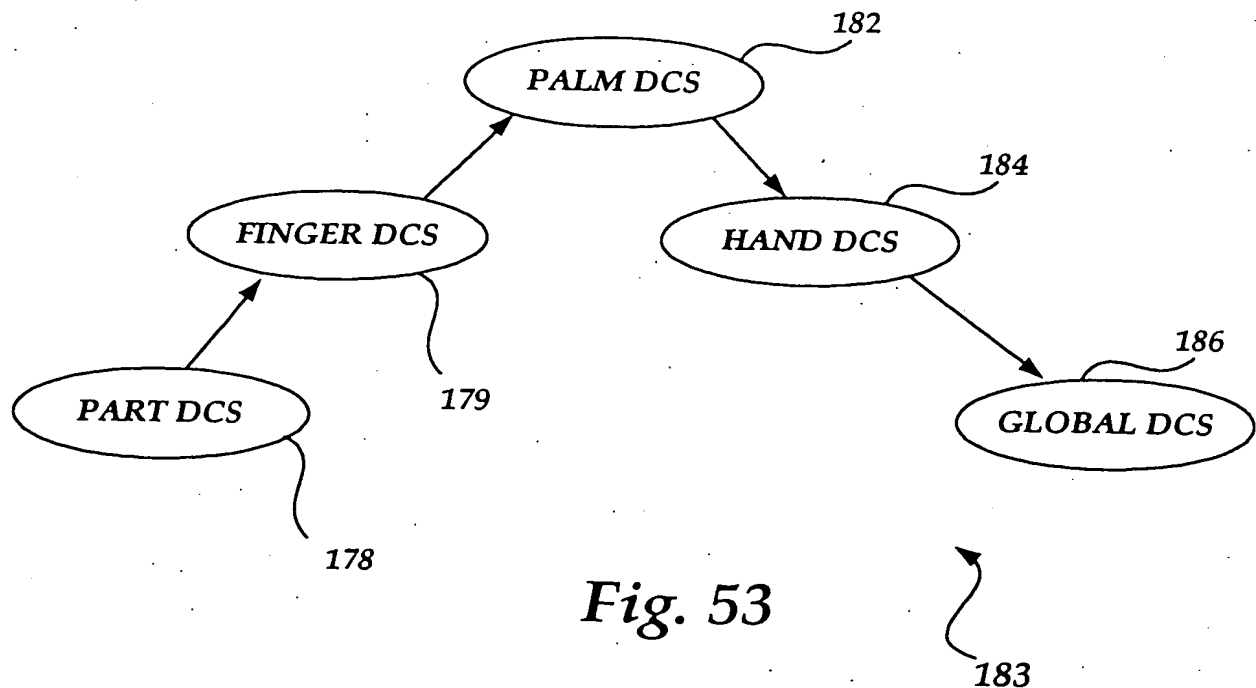


Fig. 53

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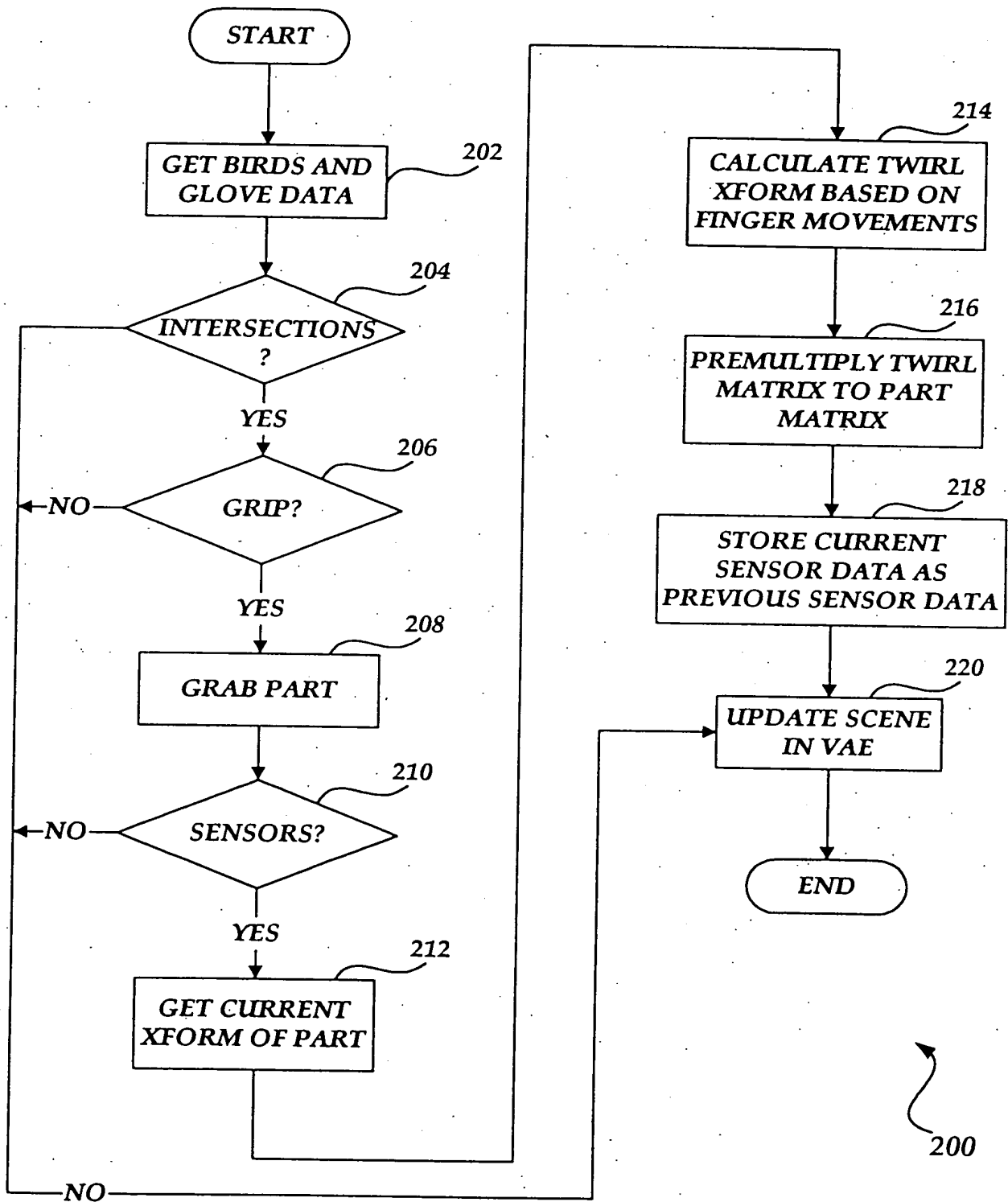


Fig. 52

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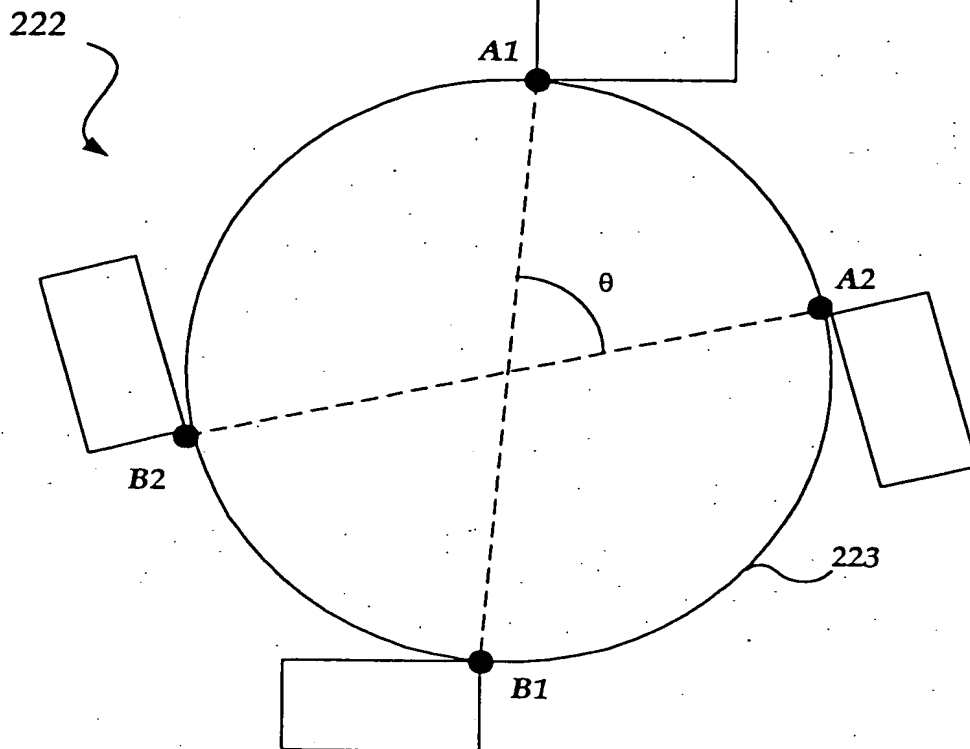


Fig. 54

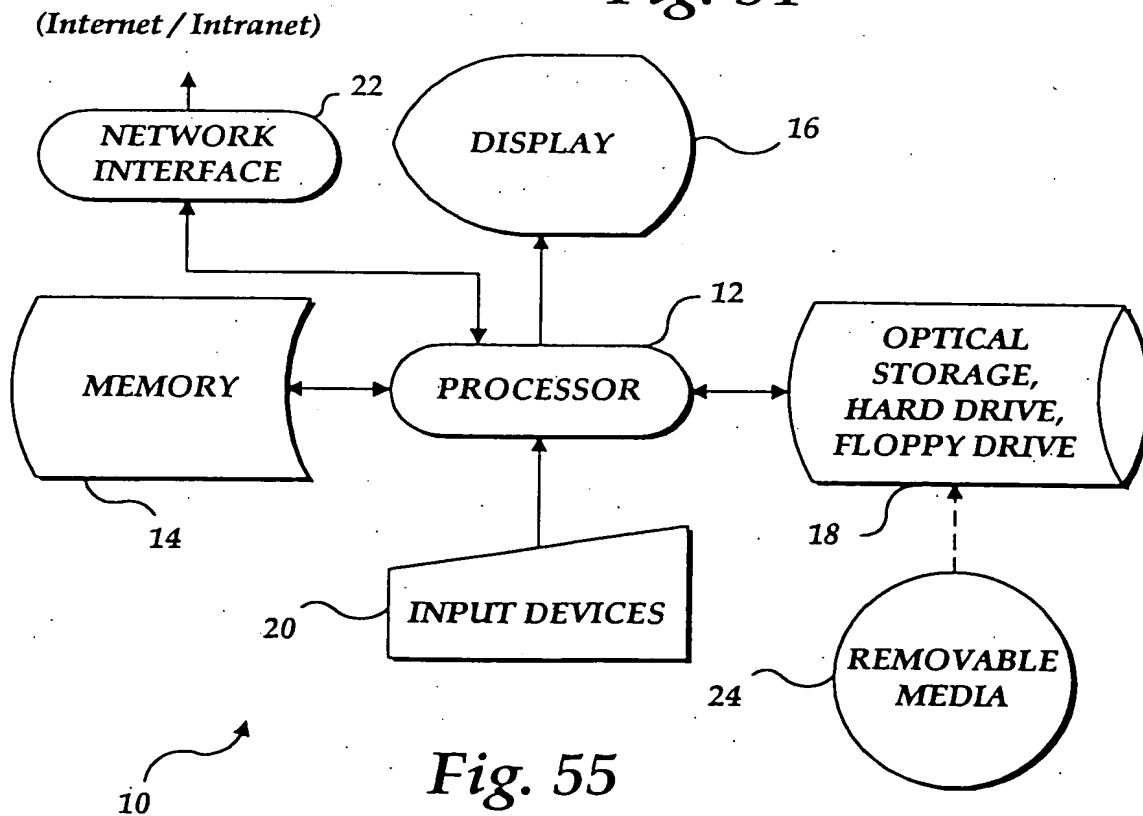


Fig. 55